



DECTEC INTERNATIONAL INC.

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September 9, 1991

Director, William Sessions
FBI
Pennsylvania Avenue and 10th Street
Washington, DC 20535

RE: Satellite Signal Theft

Dear Mr. Sessions:

We have received a copy of a memo dated June 27, 1990 and drafted by SA Beth Ann Law per telephone call made to her by Terry Luddy who was Director of Security at General Instrument Corporation, (GI) 6262 Lusk Boulevard, Nira Mesa, California, (619)535-2469, prior to his resignation last fall.

We have determined that this memo which contains wrongful allegations made by Terry Luddy regarding DECTEC International and its principal John Grayson is one of several documents which have been distributed by General Instrument over the past two years to slander DECTEC International Inc., its principal John Grayson, and DECTEC's technology - the Secure Universal Norm scrambling system (S.U.N.). Our S.U.N. technology proposes to break GI's monopoly of the satellite and cable descrambling market.

Luddy misrepresents DECTEC to the U.S. federal government without proof or documentation as a "source of illegal technology". His phone call to the FBI was made shortly after DECTEC contacted Reiss Media Corporation to inform the pay per view movie provider that DECTEC was able to secure GI's Videocipher II data stream in order to reduce the occurrence of signal theft by pirated GI product. Reiss confronted GI with DECTEC's proposal, at which time, GI initiated a disinformation campaign against our company, its principals and technology. In contrast, however, our firm is a highly respected Canadian R&D company which has been funded through grants from the Canadian Federal Government.

With this writing, we request that the FBI regard all statements made by GI and its distributors about DECTEC as suspect for two reasons: 1- GI directly benefits from and has encouraged signal theft, and 2 - GI has been aware of DECTEC's 3 year running research and development project to develop a scrambling system that was backward compatible to GI's VCII, and thereby able to compete with GI.



Recycled Paper

In response to the allegations in the cited memo, DECTEC is not a pirate company and has never been involved in the manufacture or distribution of pirate or other illegal devices. DECTEC is a research and development firm which has spent the last three years blind engineering GI's VCII technology in order to develop a legal descrambler which would be capable of converting owners of illegal VCII's, which currently number 2 million, into paying television subscribers.

As was referenced in the presentation to Reiss Media over two years ago, while the VCII system is inherently inferior to most scrambling systems, DECTEC is able to secure VCII encoders to drastically reduce the amount of piracy. It has been our position as a Canadian firm faced with selling our S.U.N. product in a country where by GI's own admission "98% of all GI's VCII's are pirated," that our S.U.N. technology threatens GI's present monopoly position, and as a result we would face ruthless disinformation campaigns and slanderous assaults on our company and person.

We are available to discuss this issue with you in greater detail and we formally express to you our concern that our competitor is using agencies of the U.S. government to maintain an unregulated market dominance and deter competition.

Sincerely,



John Grayson, CEO
DECTEC International Inc.

cc: SA Beth Ann Law
FBI Field Offices

ebg/fbi.1et

DecTec's on Deck:

Grayson Prepares to Challenge VideoCipher

BY DAVID HARTSHORN

Just a stone's throw over the U.S./Canadian border, in Sidney, British Columbia, John Grayson is making final preparations before taking on General Instrument. Grayson, who is president of DecTec, the company that developed the controversial Secure Universal Norm (SUN) descrambling system, told *TVRO Dealer* in a recent interview that he plans to launch his unit in the U.S. before summer's end.

A few months ago that would have seemed an implausible scenario. Embroiled in a lawsuit with GI, which alleged that DecTec had lifted proprietary technology to manufacture the "Black-Cipher", many believed the odds that the company would become a serious contender in the U.S. were long at best.

But DecTec has held its own in court. On June 3, a Canadian federal judge adjourned a hearing following GI's failure to produce "all materials they intend to rely on at the hearing." As a result of GI's so-called "footdragging," the court would not schedule further deliberations on the case until 1992.

Grayson, meantime, counterpunched with a lawsuit of his own, charging GI with infringing the DecTec system (*TVRO Dealer*, July). DecTec is seeking a permanent injunction prohibiting GI from selling smart card descramblers, said Grayson: "Our concern is that GI will use the proprietary technology [that] they removed from our research computers in January in order to upgrade their VC II Plus to their Renewable Security version utilizing CipherCard."

Doing business through the courts is beginning to grow on Grayson. Calling GI's legal protestations part of a "crazy backdrop" to doing business in the U.S., he said the lawsuit has been more of a help than a hindrance, because it has allowed DecTec to have the courts "supervise and adjudicate the fact that the DecTec product doesn't infringe on any of GI's patents or copyrights."

A Tilted Playing Field

Breaking into the U.S. market is Grayson's first priority. But the North American TVRO market is "badly distorted," he said, and the region has

become the "laughing stock" of the international community, with an 80-100 percent signal theft rate in some areas. No other region has achieved such a "crazy imbalance," as other countries rake in "tons of money" with secure programming: "They're all looking here and saying, 'You must be crazy to let things get this far.'"

Grayson claims to have the solution. He plans nothing less than to allay programmers' and consumers' skepticism over decoding technology, enhance distributors' bottom line (through a lower price), and enable manufacturers to license production of the product "virtually overnight," because it consists of off-the-shelf parts.

Acknowledging that help from second parties will be necessary, Grayson declined to name names, saying that "this is a war of intimidation. Any time the competition gets wind of who we're talking to, they ... try to threaten and badger them into sticking with the VideoCipher system." Grayson said he has been speaking with distributors, programmers and manufacturers for "many months."

At our deadline, the backwards-compatible product was to be formally released in the U.S. in July, but Grayson said there were "a few loose ends" to be sewn up, and those may delay the launch until August.

As for financing, he said DecTec has investors "standing in the background," but there have been no public announcements because the company is waiting to release the product in the U.S. and test the market to gauge consumer acceptance. In addition, the company will try to show programmers that it's technically possible to have a 100 percent return on their programming dollar.

Grayson said U.S.-based manufacturers and entities outside the industry will be his primary sources of funding, particularly the latter. Grayson said would-be European investors also may invest.

The Sales Pitch

The way Grayson sees it, the role of SUN — a product he refers to as a "conditional-access module" — is to provide consumers with a greater choice of programming and a "comfort zone" so that if the technology changes, their investment is safe; in a worst-case scenario, all that will be required is a smart card. He said the system can decode and process paid-for subscriptions using other encryption technologies, such as Oak or B-MAC.

The system, which can be used to decode C- and Ku-band transmissions, consists of one module de-

DecTec's Secure Universal Norm has a new authorization feature, on-screen displays and parental-control codes.



signed to fit any of the three million IRDs manufactured to date. The system has been field tested in Canada, where its reliability has been proven in remote installation conditions. Grayson said the product works with every IRD now being manufactured.

But wrinkles in the software had to be ironed out first. Grayson said there were incompatibility problems with the output voltage of the IRD chassis, many of which have an unregulated power supply and rely on the high load of the VideoCipher module to maintain five volts of power. SUN requires 80 percent less power; as a result of the unregulated power supply, voltage would drop when there was less demand, so DecTec had to adjust the voltage-acceptance window. Grayson said SUN now works twice as fast.

All that should remain is to sign up manufacturers, but gaining their support is a complicated, if enticing, prospect. "You have to bear in mind that the majority of the IRD manufacturers are being held up for ransom by General Instrument. So going to the manufacturers isn't our first priority, because the company has to approach a willing marketplace instead of an intimidated market."

Grayson said to have manufacturers integrate SUN with their various receivers is an "attractive proposition," if they make a full commitment to manufacturing SUN they stand to save 38 percent of what they currently are paying for VideoCipher. Based on current sales figures, Grayson said the industry is selling about 20,000 systems per month. If an IRD manufacturer were to take on full manufacturing of the modules, the collective savings would be \$30 million per year.

Be that as it may, Grayson will reach consumers by going direct to distributors, who then will sell the product to TVRO dealers. Grayson said he may contact every dealer organization in the U.S. and Canada to enlist their support. He expects the sale price per unit to distributors to be "less than \$300," which he said is \$75-\$80 less than GI.

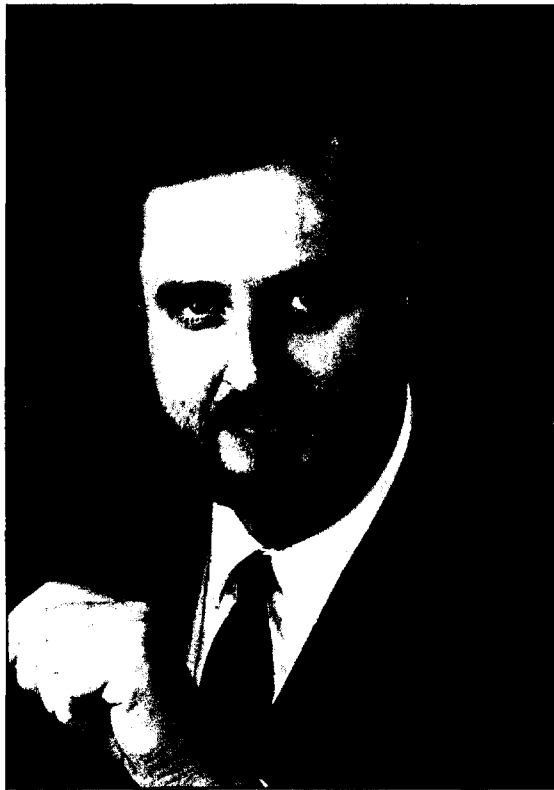
Across the Lake

Grayson says the amount of research money committed to DecTec by the Canadian government is expected to at least double this year, because Ottawa is committed to finding as many new markets for its high-tech companies as possible, hence its interest in sponsoring DecTec on a mission to a recent trade show in Montreaux, Switzerland.

Grayson said he recently spent a week meeting European manufacturers and, at the time of our interview in mid-June, DecTec's director of business development was in London "surveying the marketplace." The meetings were to see what approach is most appropriate for a company with a neutral digital platform to which a multiplicity of encryption systems can be connected.

To receive all satellite channels in Europe, consumers need seven decoders on their TV sets. Thus, there are moves afoot on the Continent to come up with a basic universal standard. The first approach involves D2-MAC, but the governments also are considering a broader standard that may provide an opportunity for DecTec.

Proposals pending before the European Economic Commission would be more far-reaching than the interim decision made on the D2-MAC



standard for 1994. Grayson said the proposal calls for a basic digital platform that leaves nothing proprietary in consumer homes. "Everything [would be] loaded on the smart card. That way, smaller research and development companies that are able to move more quickly can get into the game. You want to see a basic digital standard industry where anybody can use whatever kind of encryption system they want. But the system still always consists of only one box."

Grayson's interest in Europe stems partly from the fact that he isn't convinced that North America is the best place to do business. Grayson met several North American manufacturers in Europe, and "frankly, some of our really pioneer players consider North America to be a stagnant marketplace." Grayson said the U.S. market should generate 10 times more system sales than the Europeans: "Look at England — they're selling 750,000 systems between now and Christmas. That's where we ought to be."

Grayson said he may focus his attention on Europe, gain market position (and revenues), then use that base as a springboard to penetrate the U.S. market. Another "equally possible" scenario depends on the formation of a strong consumer base in the U.S. "You know [some consumers] have gone through buying the same module three times." If the U.S. market recognizes the sensibility of buying a reprogrammable module, Grayson said, it won't cost consumers "an arm and a leg every time someone says 'Oops... 56 channels aren't enough... you have to buy a [new module]'."

It remains to be seen what the future holds for DecTec and only time will tell whether Grayson has created an encryption device that offers a way out of the scrambling mess now afflicting North America and Western Europe.

TVRO

Above:
John Grayson, CEO
of Canada-based
DecTec
International,
plans to sell his
decoder through
U.S. distributors to
TVRO dealers.

Satellite Broadcasting and Communications Association of America

Charles C. Hewitt
President

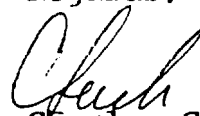
September 23, 1991

Mr. John Grayson
Chief Executive Officer
DECTEC International Inc.
P.O. Box 2275
Sidney, B.C. V8L 3S8
Canada

Dear John:

Enlosed is the FCC's Notice regarding encryption standards.

Regards,



Charles C. Hewitt
President



NEWS

FEDERAL COMMUNICATIONS COMMISSION
1919 M STREET, N.W.
WASHINGTON, D.C. 20554

News media information 202 / 632-5050
Recorded listing of releases and texts
202 / 632-0002

This is an unofficial announcement of Commission action. Release of the full text of a Commission order constitutes official action. See MCI v. FCC, 515 F.2d 385 (D.C. Cir. 1975)

Report No. DC-

ACTION IN DOCKET CASE

April 12, 1990

FCC FINDS SATELLITE CABLE PROGRAMMING ENCRYPTION STANDARDS WOULD NOT SERVE THE PUBLIC INTEREST (GEN. DOCKET 89-78)

The Commission today adopted a Report finding that mandatory encryption standards for satellite cable programming would not serve the public interest. The inquiry was conducted pursuant to Congressional instructions in the Satellite Home Viewer Act of 1988.

The Report finds that the Videocipher II system remains the de facto industry standard, notwithstanding the prospective launch of certain satellite services that are unlikely to utilize it. Dish owners wishing to receive satellite cable programming still need purchase only one decoder.

Moreover, mandatory standards would disadvantage consumers by reducing the incentives for technical advance in encryption technology and retarding the adoption of innovations. In particular, standards would limit the flexibility of programmers and manufacturers to adjust encryption systems in response to theft of satellite services ("piracy"), which is the industry's number one problem. Moreover, adoption of a standard could lead to disclosure of information that would help signal pirates.

The Videocipher II system is covered by patents owned by the General Instrument Corporation. That firm has recently introduced what it describes as a "new generation" of decoder, the Videocipher II Plus, which is designed to be much more resistant to tampering than is the Videocipher II. The Report concludes that the Videocipher II Plus will not obsolete legally-authorized Videocipher II decoders.

The Report also finds adoption of a standard per se would not affect decoder prices nor have an impact on the related matter of competition in the manufacture of decoders. Prices and competition among decoder producers would depend on the particular characteristics of the standard chosen and on the licensing practices of the owners of any proprietary technology involved.

The Report considers concerns expressed by some commenters regarding the licensing and other commercial practices of General Instrument Corporation. Because Videocipher II equipment is widely available, and in deference to the underlying patent law, the Report finds that no additional regulatory oversight of the General Instrument Corporation by the Commission is appropriate at this time. Nevertheless, the Report declares that the Commission will not ignore evidence of abuse by patent owners of any proprietary technology used in the encryption of satellite cable programming.

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The Report also examines the potential effect of a Commission standard setting proceeding on the home satellite dish industry. Based on past experience, such a proceeding, and the attendant litigation, could take years. During that time, it is likely that satellite equipment sales would drop significantly and the industry's incentives to combat piracy would be diminished. The lengthy period of uncertainty associated with this process could also retard the introduction of new program services.

Action by the Commission April 12, 1990, by Report (FCC 90-///).
Commissioners

-FCC-

News Media contact: Audrey Spivack at (202) 632-5050
Office of Plans and Policy contact: Jonathan Levy at (202) 653-3940

THE S.U.N. SYSTEM

**Presentation by John Grayson, CEO Dectec International Inc.,
before the Subcommittee for Transitional Marketing of the Satellite
Broadcasting & Communications Association**

First I'd like to state that I appreciate the time afforded our company today, but would like to mention that these next 15 minutes is hardly enough time to brush the surface of how much technology has changed since scrambling systems like Videocipher were first developed over ten years ago.

Fundamentally, it's like the difference between a calculator and a computer. Where first generation scrambling devices like the Videocipher are hard wired, they can perform only the functions they were designed for. Today, however, with explosive advancements in the semiconductor industry, we have been able to develop a software approach to scrambling which allows our S.U.N. system, like a computer, to be very flexible.

The S.U.N. system first and foremost does not violate any of our competitor's patents or copyrights and it operates completely independent of the DBS Center. We use no VCII seed keys, and S.U.N. operates completely on its own.

Our Secure Universal Norm system was designed specifically to enter the direct-to-home market in North America and provide an alternative which is compatible with the de facto standard. So while the Secure Universal Norm descrambling system is backward compatible with the present VCII system, emulating VCII is not its primary feature. S.U.N.'s ability to decode Videocipher encryption is an application of our system's design. Primarily, S.U.N. was developed to be a universal, multiformat decoder capable of interfacing with a variety of existing and future scrambling technologies. We have written software to enable compatibility with VCII and Oak systems, but there also exists a variety of additional options.

Another primary design feature of S.U.N. is that it is customizable. The system can provide programmers with the flexibility and independence to operate their own proprietary scrambling schemes and algorithms. Also S.U.N. offers back offices their own unique authorization capabilities. For example, where the VCII system has an address rate of 30 customers per second, the S.U.N. system can process 3000 customers per second. S.U.N. is a software-based system which opens the door to new technology and value-added services that may be developed by programmers, broadcasters, producers, or hi-tech software companies who may have something new or different to offer. Also, just like a personal computer, the S.U.N. system can be continually enhanced and upgraded while it is in the field by simply adding new software.

When we designed the S.U.N. system our focus was on:

- Decentralizing authorization to enable less costs and greater control.
- Upgradability to enable the introduction of newer and better technology.
- Security, where we are able to provide a complete guarantee against piracy.
- And backward compatibility so that the industry would not be required to reinvest in encryption hardware in order to make the transition into next generation reprogrammable technology.

The Secure Universal Norm system is a truly universal, multiformat system that can be manufactured by any IRD manufacturer for less than half the price they currently pay for a VCII module.

Today, we are not asking the Satellite Broadcasting and Communication Association and the satellite industry to accept this or any system, we request only that a framework be allowed to exist through which many new systems can be introduced, innovation can flourish, and competition can be fostered.

Our typical initial presentation takes about 1 1/2 hours so I'm intentionally setting aside the technical explanation of the S.U.N. system which describes how the system is able to process many different decoders in one, be completely secure, and allow for low cost in-the-field reprogramming.

Many of your companies have already worked with the S.U.N. product and are somewhat familiar with our design, so I'll simply move into what is the primary message we wish to convey here, today -- You have the opportunity

to open this industry to competition. It is not necessary to endorse any one system in order to facilitate the transition to a secure unpirateable environment.

Our own upgrade plan, for instance, which we have discussed with several programmers does not exclude our competitor, nor does it discriminate against any consumer or programmer in the implementation of an upgrade to a secure environment.

Our plan asks that members of the industry be allowed access to technologies from "multiple suppliers on an interoperable basis", and that "decoders from any vendor should work transparently with encoders built by any other vendor". What we are asking you to accept is the very same thing that Cable Labs has requested in their most recent RFP.

The Secure Universal Norm system isn't a VCII clone. It doesn't merely mimic the functions of Videocipher. S.U.N. introduces a universal, transparent interface which provides this industry and the consumer an open framework through which new systems and features may be continually added. Also we are able to license and transfer appropriate control of the S.U.N. system to anyone -- programmers, manufacturers, Hollywood.

What we hope for, here, is that you will make the decision to foster competition in this industry. Competition will bring most everyone what they ultimately seek which is better service, lower pricing, and greater security. We ask that you do not freeze us or anyone else out of the direct-to-home market and that you do not discriminate in your actions to convert the marketbase. We feel that we can contribute not only a superior and less costly technology, but we can help upgrade the 2 million owners of illegal VCII's so that everyone is paying for programming.

However, in order for us to effectively offer our perspective and work with the SBCA to facilitate an industry-wide conversion plan, we request that we no longer be excluded. For example, there is nothing in your bylaws which would preclude us from becoming a member of the SBCA today and to fully participate in these meetings. We would like to be given the time to formally present a plan to you, and we would like the opportunity to share our expertise in signal security in order to help legitimize the satellite industry.

We hope to work constructively and positively with the SBCA and we sincerely hope that the SBCA realizes that by either delaying our membership or accepting our competitor as the sole provider of decryption technology that our business will be harmed by such decisions and that the SBCA could put us in a position to seek legal remedy.

But that aside, I again convey our sincerity in wanting to work with this Committee and to enable free upgrades so that this industry can get on its feet and truly become an important revenue source for programmers. Now, I am more than happy to answer any questions I can about the S.U.N. technology.

GENERAL INSTRUMENT

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FOR IMMEDIATE RELEASE

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GENERAL INSTRUMENT, SBCA LAUNCH PROGRAM TO CONVERT OWNERS OF ILLEGALLY MODIFIED SATELLITE TV DESCRAMBLERS

SAN DIEGO, CA (May 1, 1989) -- A month-long test Conversion Program for owners of illegally modified satellite TV descramblers kicked off today in a cooperative effort of General Instrument Corp.'s VideoCipher Division and the Satellite Broadcasting and Communications Association (SBCA).

The program is being offered in response to increasing requests by consumers who want to return to the legitimate use of descramblers.

The Module Conversion Program, a joint effort of the VideoCipher Division and the SBCA Retail Council, is designed to help

- more -

legitimate TVRO retailers increase sales, while recapturing those consumers who have been misled into signal theft by pirate merchants.

In addition to fighting piracy by converting consumers, the test program is expected to aid industry-wide anti-piracy efforts by obtaining data that can be used to shut down other illegally modified descramblers with electronic countermeasures (ECMs) and to initiate criminal and civil actions against pirate dealers.

The test program will allow consumers to return working pirate descramblers and purchase a replacement, legal descrambler module at prices set by participating retailers. General Instrument, as part of the program, said it will pledge not to seek civil litigation against participants.

This program gives consumers a solution to their two major concerns: a chance to return to legal satellite TV viewing, and the opportunity to end the risk of civil litigation. In addition, participating consumers will avoid the inevitability that their pirate unit will be struck by an ECM, which shuts down illegal units.

According to Richard Armstrong, the vice president directing the VideoCipher Division's support of the Conversion Program, more than 300 dealers have enrolled in the VideoCipher Module Service Dealer (VMSD) program to date, which automatically qualifies them for participation in the May Conversion Program.

Participating retailers will be able to purchase descrambler modules for sale to consumers wishing to trade in their

working pirate descramblers for an initial purchase price of \$239. Module retail prices will be set by each dealer.

Under the test program, dealers will have the opportunity to qualify for up to \$100 in rebates with the return of a working pirate module to General Instrument. A \$40 rebate will be given for the return of a working module (a program requirement), with a second rebate of \$50 being issued if the "converted" consumer has purchased subscriptions to TVRO programming. A third rebate of \$10 will be given if the identity and locations of the person, business location or the pirate who supplied the consumer with the pirate descrambler are also provided.

All administrative, handling and return shipping costs of the program will be paid by General Instrument. In addition, General Instrument will contribute \$5 per returned working "pirate" module to the SBCA Anti-Piracy Task Force in an effort to expand its efforts.

General Instrument is the industry leader in cable TV electronics, coaxial cable and satellite TV encryption systems. The company's primary strategies are directed toward communications systems. The company's common stock is listed on the New York, Midwest, Pacific and London stock exchanges.